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| Last updated: | July 2025 |

**JOB DESCRIPTION**

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| Post title: | **Specialist Technician in Optical Manufacturing** | | |
| School/Department: | Optoelectronics Research Centre | | |
| Faculty: | FEPS | | |
| Career Pathway: | Technical and Experimental (TAE) | Level: | 4 |
| Posts responsible to: | James Gates | | |
| Posts responsible for: | None | | |
| Post base: | Non Office-based (see job hazard analysis) | | |

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| Job purpose |
| This post will support the academic and commercial user community of the Optoelectronics Research Centre (ORC). The post holder will be responsible for operating and maintaining equipment for fabricating optical devices, including ultra-precision tools, polishing, material characterisation, and cleanroom tools. In addition, they will assist in the management of the laboratory, including controlling access, training and supervising users, and developing processes for projects and commercial clients. The role will also include supporting researchers in other areas of fabrication and characterisation, including work in a cleanroom and optical laboratories. |

| Key accountabilities/primary responsibilities | | % Time |
| --- | --- | --- |
|  | To ensure specialist technical support for the department’s education, research and/or enterprise activity; designing, developing and building specialist machines and equipment and developing solutions, techniques and procedures. | 50 % |
|  | To contribute to academic publications in the area of technical specialism. | 5 % |
|  | To provide a repair and fault-finding service including planned maintenance of equipment and devices within the work environment, advising on future resource requirements and ensuring health and safety standards within the environment are complied with by staff and students. | 15 % |
|  | To oversee the budget of the work area, maintaining appropriate records. | 5 % |
|  | To attend internal and external meetings to ensure the work unit issues are represented. | 5 % |
|  | To demonstrate and advise research staff and students on techniques and the use of materials in relation to University projects, assisting in the interpretation of test results. Provide advice and support relating to the use of any equipment or devices and operate as required. | 10 % |
|  | To plan, organise and manage the work environment; recruiting, training and developing own technical team, and supervising non-technical staff. | 5 % |
|  | Any other duties as allocated by the line manager following consultation with the post holder. | 5 % |

| Internal and external relationships |
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| Academic and commercial staff/students – Discuss process issues, provide feedback from results, provide training and technical expertise, develop process solutions where a standard process does not exist to meet project or contract goals and deadlines.  Relevant consumable suppliers and external contacts.  Tool Vendors – Discuss tool issues, new developments and modifications. Supervise vendor process engineer visits.  Other members of the department/University staff – such as building maintenance staff. |

| Special Requirements |
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**PERSON SPECIFICATION**

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| Criteria | Essential | Desirable | How to be assessed |
| Qualifications, knowledge and experience | Skill level equivalent to achievement of HND, Degree, NVQ4 or basic professional qualification.  Substantial experience in a relevant technical field, with proven experience in successfully planning and progressing work activities.  Understanding of how the specialist technical services provided by the post holder support the objectives of the University.  Ability to make effective use of standard and specialist computer systems | Membership of a relevant technical professional body.  Knowledge of the design and build of optical assemblies.  Experience working in optical laboratories and cleanrooms. |  |
| Planning and organising | Able to progress a broad range of activities within professional guidelines and in support of University policy.  Experience of successful project management. |  |  |
| Problem solving and initiative | Ability to apply specialist technical knowledge to analyse complex problems and recommend solutions/plans of action. |  |  |
| Management and teamwork | Able to proactively work with colleagues in other work areas to achieve outcomes.  Experience of successfully managing and developing staff.  Able to delegate effectively, understanding the strengths and weaknesses of team members to build effective teamwork.  Able to formulate development plans for own staff to meet required skills. |  |  |
| Communicating and influencing | Able to provide accurate and timely specialist guidance on complex issues.  Able to use influencing and negotiating skills to develop understanding and gain co-operation. |  |  |
| Other skills and behaviours |  |  |  |
| Special requirements | Willingness to undertake Health and Safety training specific to role. |  |  |

**JOB HAZARD ANALYSIS**

**Is this an office-based post?**

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| Yes | If this post is an office-based job with routine office hazards (eg: use of VDU), no further information needs to be supplied. Do not complete the section below. |
| No | If this post is not office-based or has some hazards other than routine office (eg: more than use of VDU) please complete the analysis below.  Hiring managers are asked to complete this section as accurately as possible to ensure the safety of the post-holder. |

## - HR will send a full PEHQ to all applicants for this position. Please note, if full health clearance is required for a role, this will apply to all individuals, including existing members of staff.

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| **ENVIRONMENTAL EXPOSURES** | **Occasionally**  (<30% of time) | **Frequently**  (30-60% of time) | **Constantly**  (> 60% of time) |
| Outside work |  |  |  |
| Extremes of temperature (eg: fridge/ furnace) |  |  |  |
| ## Potential for exposure to body fluids |  |  |  |
| ## Noise (greater than 80 dba - 8 hrs twa) |  |  |  |
| ## Exposure to hazardous substances (eg: solvents, liquids, dust, fumes, biohazards). Specify below: | Yes |  |  |
| Frequent hand washing |  |  |  |
| Ionising radiation |  |  |  |
| **EQUIPMENT/TOOLS/MACHINES USED** | | | |
| ## Food handling |  |  |  |
| ## Driving university vehicles(eg: car/van/LGV/PCV) |  |  |  |
| ## Use of latex gloves (prohibited unless specific clinical necessity) |  |  |  |
| ## Vibrating tools (eg: strimmers, hammer drill, lawnmowers) |  |  |  |
| **PHYSICAL ABILITIES** | | | |
| Load manual handling | yes |  |  |
| Repetitive crouching/kneeling/stooping |  |  |  |
| Repetitive pulling/pushing |  |  |  |
| Repetitive lifting |  |  |  |
| Standing for prolonged periods | yes |  |  |
| Repetitive climbing (ie: steps, stools, ladders, stairs) |  |  |  |
| Fine motor grips (eg: pipetting) |  |  |  |
| Gross motor grips |  |  |  |
| Repetitive reaching below shoulder height |  |  |  |
| Repetitive reaching at shoulder height |  |  |  |
| Repetitive reaching above shoulder height |  |  |  |
| **PSYCHOSOCIAL ISSUES** | | | |
| Face to face contact with public |  |  |  |
| Lone working |  |  |  |
| ## Shift work/night work/on call duties |  |  |  |